Application No.: 09/703,038

Docket No.: 59182/P004US/10020641

AMENDMENTS TO THE ABSTRACT

Please substitute the following paragraph(s) for the abstract now appearing in the currently filed specification:

A chunk format for a large-scale, high data throughput router includes a preamble that allows each individual chunk to have clock and data recovery performed before the chunk data is retrieved. The format includes a chunk header that contains information specific to the entire chunk. A chunk according to the present format can contain multiple packet segments, with each segment having its own packet header for packet-specific information. The format provides for a scrambler seed which allows scrambling the data to achieve a favorable zero and one balance as well as minimal run lengths. There can be a random choice of available scrambler seeds for any particular chunk to avoid malicious forcing of zero and one patterns or run lengths of bit zeroes and ones. There are forward error correction (FEC) bytes as well as a chunk cyclical redundancy check (CRC) as well as forward error correction (FEC) bytes to detect and/or correct any errors and also to insure a high degree of data and control integrity. Advantageously, a framing symbol inserted into the chunk format itself allows the receiving circuitry to identify or locate a particular chunk format. "Break Bytes" and "Make Bytes" fields located at the beginning of a chunk preamble precondition an optical receiver to a proper state before the actual chunk arrives at the receiver.

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